

# United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	COMPANY
10/697,387	10/30/2003	Masahide Onishi	MAT-8480US	CONFIRMATION NO.
23122 RATNERPR	7590 06/03/2004		EXAMI	NER
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VALLEY FO	RGE, PA 19482-0980	:	ART UNIT	PAPER NUMBER
•			2862	
	. ,		DATE MAILED: 06/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/697,387	ONISHI ET AL.
Since Action Summary	Examiner	Art Unit
The Man we	Bot LeDynh	2862
The MAILING DATE of this communication app Period for Reply	ars on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period we reallure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	IS SET TO EXPIRE 3 MONTH  36(a). In no event, however, may a reply be till  within the statutory minimum of thirty (30) da  ill apply and will expire SIX (6) MONTHS from	I(S) FROM imely filed bys will be considered timely.
Status		-, may rounds any
1) Responsive to communication (a) filed		·
2-) The service to communication(s) filed on		
2a) This action is <b>FINAL</b> . 2b) This	action is non-final.	*
Since this application is in condition for allowant	ce except for formal matters, may	OSECUTION as to the
closed in accordance with the practice under Ex	Cparte Quavle 1935 C D 44 44	Securior as to the merits is
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Disposition of Claims		• •
4) $\square$ Claim(s) <u>1-6</u> is/are pending in the application.		· ·
4a) Of the above claim(s) is/are withdrawi	- <b>f</b>	
5) Claim(s) is/are allowed.	i from consideration.	
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### **DETAILED ACTION**

#### **Drawings**

The drawings are objected to because Fig 11 is not labeled as "Prior Art." A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 4-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Takashi et al. (JP 2002-206910). Takashi et al. discloses the same invention as claimed: A rotation angle detector comprising: a rotor 1; first and second detecting elements 2 and 3 which rotate according to a rotation of said rotor; first and second detecting units (4-8; first magnet and magnetic sensor 4 and 7; second magnet and magnetic sensor 5 and 8) for detecting rotations of said first and second detecting elements, respectively; and a control unit for detecting a rotation angle of said rotor based on a first signal when a difference between said first and second signals output from said first and second detecting units ranges within a predetermined range. The reference is written in Japanese; however, due to the sameness between the claimed

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invention and the references (i.e., Figs 1, 8A-B, and 7A-B of the claimed invention and Figs. 7, 10 and 9 of the references, respectively), the limitation "a control unit for detecting a rotation angle of said rotor based on a first signal when a difference between said first and second signals output from said first and second detecting units ranges within a predetermined range" can be derived from the references. See Figs. 7 and 9-10.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. (JP 2002-206910). Takashi et al. discloses substantially the same invention as claimed, except for the second detecting unit including a Hall element which detects a magnetic field of the second magnet. It is well known in the sensor art that a Hall element detects a rotation angle by the change in the magnetic field of a corresponding magnet. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takashi et al. by using a Hall element in the second detecting unit. The motivation is to detect the rotation angle of the rotor by the change in the magnetic field of a second magnet.

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### Allowable Subject Matter

Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bot LeDynh whose telephone number is 5712722231. The examiner can normally be reached on Maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nancy Le can be reached on 5712722235. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL/ 2004

Bot LeDynh, JD, PhD, DA Primary Examiner